

**CAPSTONE INDUSTRY COUNCIL MEETING
MINUTES
May 10, 2006**

The Alaskan Capstone Industry Council met at the Alaska DOT/PF Building on May 10, 2006, at 8:00 am.

The following agenda items were presented:

0800 – 0945 Information Sharing

Opening	Sue Gardner
Technical Status Update	Mark Olson
Operations Status Update	Ray Collins
FAA JRC Planning Status Update	Sue Gardner
WAAS Update	JoAnn Ford
Capstone Coalition Update	Felix Maguire

0945 - 1000 Industry Feedback (Round Table)

Information Sharing

Opening: Sue Gardner, Capstone and Weather Camera Programs Manager

Sue Gardner opened the meeting by welcoming the attendees and introducing Howard Swancy, Senior Advisor to the Deputy Administrator, Bobby Sturgell. Introductions followed around the room. An attendance list is attached to the minutes.

The meeting followed the agenda, beginning with a background on the FAA's removal of ADS-B surveillance data from the air traffic controller displays on March 24, 2006.

Rick Day, ATO-E, was present at the April Capstone Industry Council meeting. At that time, efforts were focused on strategies for moving forward. Rick Day discussed bringing a Safety Assessment Team to Alaska (to look at contributing factors to removal of ADS-B from the glass) and developing a plan on how to bring ADS-B back to the displays.

A Safety Assessment Team comprised of approximately 20 members from several FAA lines of business was in Anchorage the week of April 17, 2006. The team worked with representatives from Air Traffic at Anchorage Center and with the Capstone Program Office to gather data. The team has been working

diligently on preparing a report based on the information they gathered during their visit. The Capstone Program Office is continuing to provide information as requests come in, and are awaiting results of the report. ZAN AT expects additional requests for information as well.

Some of the services that were not available at the time of the April Capstone Industry Council meeting have since been restored, including the Bethel Tower display (available for situational awareness), Flight Explorer for flight monitoring capability (for all 10 of the GBTs in the Y-K Delta area). Due to an immediate switchover to the alternate plan for archiving flight tracks for search and rescue , there was no loss of service there.

Sue Gardner discussed highlights of Rick Day's visit the week of April 10, 2006. During his visit, Mr. Day spent time at Anchorage ARTCC, the Capstone Office, and UAA in Anchorage. He traveled to Bethel, Alaska, with Nelson Aviation, took a Capstone-equipped chartered flight to the village of Tuntutulik, and visited operators in Juneau, Alaska. The visit was a great opportunity for Mr. Day to see firsthand the work being done in partnership here in Alaska.

After Mr. Day's departure from Juneau on April 13, 2006, the remainder of the Capstone team headed to Ketchikan, Alaska, to meetings with operators there. The meetings were very productive, and the Capstone Office came away with a list of action items that are currently being worked.

Capstone FAQs are being updated by MITRE and will be posted on the Capstone web site as soon as they are available.

Another development since the previous Capstone Industry Council meeting was a letter prepared by the Alaska Aviation Coordination Council (AACC) and sent to Administrator Blakey. The letter expressed some concerns about services related to Capstone technology. AACC has received a response.

Technical Status Update

Mark Olson reported that the list of proposed FIS-B product enhancements (distributed at the April Capstone Industry Council meeting) would be discussed at the Transition Working Group (TWG) meeting on May 10, 2006, 1:30 p.m., at the Capstone Program Office.

Mark reported on the status of services (ADS-B, FIS-B, TIS-B, CRABS, and VOLPE/Flight Explorer) at the 10 Phase I Y-K Delta sites plus Site Summit, and 14 Phase II GBT SE Alaska sites.

A MS PowerPoint slide depicting 80 of the proposed 85 GBT sites for statewide implementation was used for the presentation. The sites include 25 Phase I and Phase II sites, and 60 Phase III sites.

Operations Status Update

Ray Collins briefed on the status of the Chelton 6.0B software update, noting the importance to operators in SE Alaska. Ray explained that the software “takes the aircraft currently operating with Garmin equipment and puts it on the IDU, or glass display, so that pilots flying down there with Chelton equipment can see the other aircraft in SE Alaska.” UAA just received the materials necessary to begin training development.

Steve Thompson has been updating the memory IDUs which are required in order to accept the new software upgrade. He has less than 20 aircraft left.

Chelton indicated on a telecon May 9, 2006, that software certification testing is about 25 percent of where they wanted it to be at this point in time. They are adding additional testers, adding a second shift, and are in the process of doing some computer reconfigurations to expedite the process. Chelton has stated that they are not comfortable with releasing the data at this time.

In response to Skip Nelson’s question of what the ETA for the Chelton 6.0B software was, Ray Collins explained that the program was late and would probably not be available until after the flying season in SE Alaska. Skip then asked how late the program was, estimating it to be around two years.

Steve Thompson offered the following explanation for program delays. Outside factors initially contributed to the slips. The interface from Garmin was not received until 1 ½ years ago. Testing and validation with a third party took excessive time (over a year), so Chelton brought the testing and validation in-house. From there, the process did not go as quickly as planned. It has been a learning process.

Ray Collins offered that the testing was very expensive and that the build had grown to include many IFR changes. Steve Thompson agreed that the changes were time consuming and expensive. Steve explained that a decision was made to go ahead and incorporate changes required by the FAA for Part 125 aircraft into the software build to avoid another \$1,000,000 for testing. He speculated that if the software upgrade was only for the display of ADS-B traffic, it would have been delivered already.

Skip Nelson asked if this was an FAA or Chelton decision. Steve Thompson responded that it was a Chelton decision to incorporate the changes to avoid additional certification costs.

Felix Maguire asked what the original contract date was, noting it was "like two years ago" and offering that if he had a roofer two years behind he would fire them. Steve Thompson relayed that he understood, but there were third parties involved as well. The third parties did not meet their obligations.

Felix Maguire reiterated that Chelton was two years behind and now would not be ready until after the flying season. He stated that Chelton should not be holding up Phase II because they chose to make a business case, but rather they should be doing what they were asked to do for Capstone and on time. "An infinite schedule is inadequate" and "Chelton managers should get this message."

Sue Gardner added that Capstone would continue the weekly telecons and ensure that Chelton is participating at the highest levels. She noted that if the software changes are not in the aircraft to provide the safety benefit, it is hurting the program.

Paul Fiduccia explained that the Chelton avionics are Level A software; this is the highest level certification software there is. By comparison, the MFD is Level D – about thirty times easier to certify.

Ray Collins next reported on progress with SE Alaska installations. The contract is currently scheduled to end June 30.

- Chelton - five in progress, five remaining, 100 total installations.
- Garmin Fixed Wing (F/W) aircraft – one in progress, three remaining, 39 total installations.
- Garmin Helicopters - three in progress, four remaining, 19 total installations. One Coastal and 8 Temsco helicopters are included on the current STC and going to be carried over. Capstone is talking to the FAA Contracting Office and Legal Dept. about addressing those helicopters. Any installations beyond these nine will be part of Phase III.
- GDL 90 Retrofits - three in progress, and zero remaining.
- GDL IDU Connection – two in progress, 14 remaining.

Ray Collins offered kudos to Ken Cox, AcroHelipro, and Jimmy Wright, for their outstanding efforts on the SE Alaska installations, and Sue Gardner extended her appreciation. Phase II installations will total 28 when the remaining nine are completed.

Jim Cieplak recalled that four years ago there were 250 commercial helicopters in SE Alaska (surveyed by UAA). He pointed out that only 28 helicopters were equipping in Phase II. Leonard Kirk offered that the majority of the commercial helicopters in SE Alaska belonged to ERA Aviation, and that ERA chose not to participate in the Capstone Program. Sue Gardner explained that ERA was flying between the Gulf of Mexico and Alaska, and until they had some type of commitment on the technology that would be used in the Gulf, they did not want to equip.

Tom George brought up the issue of STCs for three or four different types of helicopters in SE Alaska that originally opted not to equip in Phase II.

Jim Cieplak indicated that the FAA made promises in previous years that may not have been written down and captured. He stated that the FAA has an obligation to ensure the infrastructure is available, which includes STCs, and move forward with how to get all operators equipped regardless of the phase

Sue Gardner reported that the Capstone Program Office is looking at the scope of Phase II and funding allocated within that scope to make a decision on the cutoff for Phase II. Capstone and the coalition have looked at the overall statewide equipage plan and what needs to be accomplished to install the equipment as part of that plan. Who pays for the STCs--not just for helicopters but for all aircraft--is something that is being evaluated.

Pat Poe stated that this was the first he had heard about ERA waiting to equip until a decision was made on the Gulf of Mexico. He reflected on the possibility that operators in the Gulf could have also reservations about equipping until a decision was made on the system in Alaska. Mr. Poe discussed that this situation created a bridge of necessary connection between the Capstone Program Office and the National ADS-B Program and that work needed to be done.

Skip Nelson added that commercially, word on the street is that operators are waiting to see what happens in Alaska.

Sue Gardner mentioned an article that appeared in the current edition of *Aviation Week* regarding the announcement that Administrator Blakey made about the national ADS-B deployment. The article included a quote from Vincent Cappezuto on the Gulf of Mexico project, stating that he was anticipating 2008-2009 for deployment of the ground infrastructure and 2010 for air traffic services in the Gulf of Mexico.

Will Johnson talked about his visit to the Lower 48 in his Capstone equipped aircraft (Phase I) and how well the technology worked with systems there.

Ray Collins discussed the following issues in the Y-K Delta.

- N715HE (Caravan) defaults to "1200" - The pilot enters a discreet beacon code and then during flight the aircraft will intermittently default back to 1200. The problem has been narrowed to one aircraft; however, there could potentially be others. Common fixes have failed to rectify the problem. The aircraft is scheduled to be in Anchorage for maintenance. Capstone and Garmin are planning to examine it.
- Two aircraft reported a NIC-0 between February 1, 2006 and April 13, 2006. Each of the aircraft had four drops. These aircraft have been identified and will be placed on a watch list. Lari Belisle advised that more aircraft were affected and that he had reports; however, he had been too busy to file the Form 8020-11 with Flight Standards. Lari sends the information to Bob Davila. This was the first the Capstone Program Office had heard of the situation. Jim Hill and Dan Perry advised they had not seen any reports since March. Capstone will follow-up with Flight Standards.
- Garmin 5.7 software will eliminate the self-conflict alerts in transponder-equipped aircraft in the Y-K Delta. An estimated 14 aircraft need the software. Nine of these will be installed by May 22, 2006, and the remainder by May 29, 2006.

Action items from the Juneau and Ketchikan operator meetings in April were reviewed. These issues are being worked and are available on the Capstone web site.

FAA JRC Planning Status Update

Sue Gardner gave an update on the status of JRC planning efforts. The Capstone Program Office is preparing to go in front of the Executive Council (EC) June 6, 2006. This is a prebrief to the JRC in August. A lot of effort is being focused on the JRC for a final investment decision for statewide implementation.

Sue thanked all those who have participated in the TWG and Coalition meetings.

WAAS Update

JoAnn Ford provided a briefing on the status of WAAS, beginning with an update on the two satellites that were launched in the fall of 2005. The addition of these two satellites will increase communications availability in Alaska and the Lower 48 and provide dual coverage. One of the satellites is now broadcasting test messages. Testing is expected to be completed around 2007. Raytheon has noted comm. errors but they are within tolerance. If all comm. issues are resolved, improved precision will be available by August 2006, with full benefits by March 2007.

Flight Standards has assembled a team to look at potential show stoppers for the 200 ft. 1/2 mile (2.5) visibility approach minimum, and will be producing a monthly report on the status. MITRE is conducting a safety study. The first 2.5 approach minimum is planned for 2007; however, many airports will have to wait until August 2008 to enable it.

Flight Standards has observed problems with the screening tool for the 53 Alaska airports that were identified (for planning purposes) for upgrades from VFR to IFR, and is working on the corrections. The evaluation should be ready in the next few weeks.

In response to an inquiry by Howard Swancy, Sue Gardner explained how the 53 Alaska airports were selected. The TWG (a group comprised of industry reps, different lines of business within the FAA, and the State of Alaska) looked at all of the airports in Alaska and identified which airports they felt needed to be upgraded from VFR status to IFR status. The group then applied criteria that they came to consensus on, e.g., population, medical access, and economic needs, and they prioritized that list. The TWG also looked at existing IFR airports in the state and identified those where a GPS or LPV approach could be used in lieu of a VOR or NDB approach, and included these in the list.

Dennis Stoner commented that the list had not been agreed upon by the FAA and had not gone through the RAPT. He added that ATO-E and the state needed to agree to the list.

Sue Gardner responded that the list was developed by the group as their recommendation that would then go through the formal processes within the FAA. It was brought to the RAPT to be evaluated and go through that process; however, ATO-E stated they could not participate in the process at that time due to senior management direction.

Pat Poe noted that agreeing to objectives and criteria were an important success for the community.

Leonard Kirk reported that RAPT concerns were noted on the list. He added that it was important to note why the FAA had a concern so industry can explain to the community why an airport will not get an approach, and agreed with Pat Poe that it was a huge accomplishment to have a list developed and agreed to by the community.

Howard Swancy stated that he accepted the list was a work in progress and he would think the list today could possibly evolve into something different once 2.5 becomes a reality.

Felix Maguire expressed frustration with the negative feedback from the FAA and his dissatisfaction with the disagreement within the agency. He explained that the community picked 53 airports as a start. Eventually, industry hopes to upgrade every airport within the state of Alaska so that every airport and every citizen in the state can have equal access. The industry wants support to get this done. Felix advised that it was the FAA's job to provide the services for the citizens of the state or advise why they could not do it. He recommended that FAA work out their differences internally.

Capstone Coalition Update

Felix Maguire explained that statewide implementation was not Phase III; statewide is operational, not demonstration. The FAA will provide ground services and operators will provide the avionics. To make this a success, 90% of aircraft need to equip. The FAA has stated they would only provide the "ground side" if the Alaska community can show they are going to use it.

Industry has formed three committees:

- Team 1 – Requirements. Will look at what equipment will go into what airplane.
- Team 2 – Financial. Approaching banks and money institutions to get loans and grants. Goal is to ask operator to pay for 10% of costs. This will not work without a grant program, particularly for Part 91 aircraft.
- Team 3 – PR committee. Will educate the state and rally support.

The Capstone Coalition needs to proceed to support the FAA JRC process in August. Efforts were delayed when the FAA took ADSB off the glass. The FAA has a credibility problem within the state of Alaska. As Felix Maguire explained, "If someone in D.C. can flip a switch and turn it off, why would anyone in Alaska want to put money into it."

Sue Gardner is leading the effort from the FAA investment side, focusing on the ground infrastructure, IFR infrastructure enhancements. The Capstone Coalition is expecting 30+% safety improvement with statewide implementation.

Felix Maguire reported that the Capstone Coalition is looking for other vendors to reduce UAT costs. He noted that meetings with DOD and the military were possibilities to be considered. Felix stated the ROM for what the Coalition was looking to raise for avionics and what the FAA needed to contribute, noting that it was serious money and that credibility needed to be there.

Felix explained that the Coalition is often asked why they are not willing to wait four or five years when the cost of avionics should come down. He stated that the reason is because of the safety benefits that are needed now.

In response to a question from Howard Swancy on whether Felix had the impression the Capstone Program was not completely accepted in D.C., and was still in competition with the Lower 48, Felix advised that during a recent trip to D.C., he got that impression. Felix stated that he did not believe the FAA Administrator's staff was in-line with what the Administrator was stating publicly.

Howard Swancy responded that in working with the current Deputy Administrator and consistent with what the previous Administrator had said, "We believe Capstone is a unique program for Alaska." He relayed that the FAA Administrator's announcement in the last two weeks, talk of combining the offices, did not mean less priority for Capstone. Mr. Swancy went on to say that there would be discussions of administration changes, but that Capstone was not a second tier program and that the administration supported it. He advised that there has been a long-standing contention in D.C. with how the Capstone Program has been managed and with how it was funded; however, this has always been the case and will continue to be. Howard offered that Capstone was on the leading edge and would get criticism every now and then--and that when it happened maybe it was right to step back a little--but not to question the importance of the program.

Felix Maguire interjected how most people in the room had lost friends to air traffic accidents and how Capstone could make a difference.

Howard Swancy stated that Washington, D.C., is trying to stand-up a National ADS-B Program. "Capstone represents them internationally, and therefore, bears the associated burden. You offer yourselves up for an additional level of scrutiny."

Round Table

Dennis Parrish stated that he was paid by “big oil” and was on a world-wide oil aviation safety group—the ones who pay for “all this stuff” eventually. He said that the chances of running into each other on the North Slope was increasing exponentially right now; however, he could not make a decision without knowing about plans for the Gulf. Dennis pointed out that the group talks a lot about safety, but rarely discusses new technology or the cost/benefits of doing new things. He stated that ATO needs to get on-board and resolve the internal conflicts. He offered to do the lead economic studies to get the “Gulf” going and noted that it would have spin-off benefits in Alaska. “If something is planned, we can pay for it.” He said that he would do what he could to move it forward on the North Slope and could take plans to big oil. In order to move forward, Dennis said he needed to know the system was up and running and that “Rick Day’s shop” is on-board.

Conclusion and Next Meeting

The Capstone Industry Council meeting was adjourned. The next meeting is scheduled for 8:00 a.m., Wednesday, June 14, 2006, at the State DOT Building at Lake Hood.